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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,719	08/20/2003	Kenneth J. Fennewald	94004-88254	6120

27572 7590 11/09/2006

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EXAMINER

KASENGE, CHARLES R

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,719

Applicant(s)

FENNEWALD ET AL.

Examiner

Charles R. Kasenge

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-35 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 36-44 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/28/06 have been fully considered but they are not persuasive. The Office reasserts that Yoshida teaches limiting the power to a value less than full line voltage (col. 8, lines 1-16). The Examiner interprets the reduction of LD optical output power is "scaling" the power to 0 mW (col. 8, lines 7-10). This reduction of power implicitly discloses a scaling function. The Examiner reasserts that an LED is a heat-producing element. It is commonly known that all electrically powered devices dissipate some heat, even if it is minimal (see Watanabe et al. U.S. Patent 4,667,481; col. 4, lines 3-7 and Whitaker's "Fact or Fiction – LEDs don't produce heat").

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 7, and 36-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida et al. U.S. Patent 6,678,290. Referring to claims 1, 36, 39, 40 and 41, Yoshida discloses a control system that limits the wattage provided by a heat-producing element to a value less than that produced at full line voltage, the system comprising (col. 4, lines 45-57 and col. 8, lines 1-16): at least one heat-producing means (col. 4, lines 22-27 and col. 5, lines 13-19); a power

Art Unit: 2125

control means operatively associated with said at least one heat-producing means (col. 4, lines 45-57); and a power limiting function that limits the wattage provided by said at least one heat-producing means to a value less than that produced at a full line voltage through the use of a scaling function (col. 5, lines 20-26 and col. 8, lines 1-16). The Examiner interprets the “input voltage” as the full line voltage. Since the voltage is scaled down, it implicitly discloses a scaling function. Referring to claims 2 and 42-44, Yoshida discloses the control system according to claim 1 wherein said power limiting function and said scaling function resides in a module attached to said at least one heat-producing means or operatively placed between said power control means and said at least one heat-producing means (col. 4, lines 45-57).

Referring to claims 3-5, Yoshida discloses the control system according to claim 1 wherein said power limiting function and said scaling function resides in a module operatively placed between a power source and said power control means (col. 4, lines 45-57). Yoshida discloses the control system according to claim 1 wherein said power limiting function and said scaling function resides in said power control means operatively placed between a power source and said at least one heat-producing means (col. 4, lines 45-57). Yoshida discloses the control system according to claim 1 wherein said power limiting function and said scaling function resides in a module operatively placed between the output of any control device and the control input to said power control means which controls said at least one heat-producing means (col. 4, lines 45-57).

Referring to claim 7, Yoshida discloses the control system according to claim 1 further comprising a temperature controller, said temperature controller including: a temperature sensing function such that a process temperature operatively associated with said at least one heat-

Art Unit: 2125

producing means may be determined; a temperature comparison function for comparing a temperature associated with said at least one heat-producing means with a set point temperature and determining the required output (col. 5, lines 13-20 and 40-42); and an output function that provides, directly or through the use of an ancillary power control means, a method to vary the power supplied to the heat-producing means (col. 5, lines 56-61).

Referring to claims 37 and 38, Yoshida implicitly discloses the control system according to claim 36 further comprising: at least one circuit protection device operatively associated with the power receiving device (col. 4, lines 34-48). Circuit breakers are common for temperature control systems. Yoshida discloses the control system according to claim 36 further comprising at least one filtering device operatively associated with the power receiving device to suppress high frequency component generation (col. 4, lines 34-48)

Allowable Subject Matter

4. Claims 8-35 are allowed.
5. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R. Kasenge whose telephone number is 571 272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

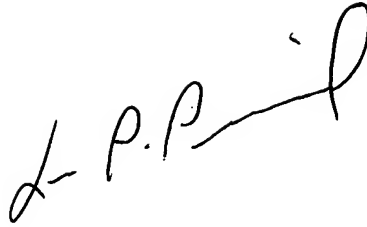
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/644,719

Art Unit: 2125

Page 6

A handwritten signature in black ink, appearing to read "L. P. Picard". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

CK

November 3, 2006

**LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**